Department of
Environmental Protection
Bureau of Land & Water Quality November. 2002

O&M Newsletter

A monthly newsletter for wastewater discharge licensees, treatment facility operators and associated persons

Standard Conditions: Operation & Maintenance

Waste discharge licenses consist of several sections including Findings of Fact, Conclusions, Approval, Special Conditions, and Standard Conditions. The Special Conditions are the effluent limits, monitoring requirements, and other special requirements that apply to a specific facility. The Standard Conditions are those provisions that are required of every licensed wastewater treatment facility. The current Maine Pollutant Discharge Elimination System Permit Standard Conditions were revised on January 16, 2001. Licensees who have not had their waste discharge license renewed since January 16, 2001 are subject to an earlier version of the Standard Conditions.

The Standard Conditions contain six categories: General Provisions; Operation and Maintenance of Facilities; Monitoring and Records; Reporting Requirements; Other Requirements; and, Definitions. While it is necessary to comply with all Standard Conditions, one condition that may be overlooked at some facilities, but is of particular importance, is the condition that licensees "at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities."

Some facilities may regularly violate this license requirement yet report overall compliance with effluent limits. The Department is pursuing an enforcement action against a municipality that has typically failed to properly maintain its facility and operate it at maximum efficiency, yet has reported only a handful of effluent violations over the past several years. Poor operation and maintenance of a facility that reports consistently good effluent results may lead to identification of other problems such as failure to properly sample, store, and analyze effluent and failure to maintain accurate records.

Licensees must not only meet license effluent limits. They must maintain their facilities in good working order and operate them at maximum efficiency. Although the Department does not typically take enforcement action solely for violating this Standard Condition, if enforcement action is taken, the Department will take into account violations of this Standard Condition when determining appropriate corrective actions and monetary penalty.

John Glowa
Enforcement Section
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GUIDANCE ON
DISPOSAL & USE OF ASSORTED SOLID WASTES
GENERATED IN MAINE

Introduction

The purpose of this guidance is to explain the disposal and utilization options for assorted solid wastes, in accordance with the solid waste rules. This guidance augments the rules; other options are provided in the rules.

The following solid wastes are covered in this guidance:

- car wash basin grit
- ash from woodwaste burn piles and hot loads areas at licensed solid waste facilities
- storm sewer grit and sediment materials removed from stormwater control structures
- vehicle repair bay drain solids
- backwash filtrate from drinking water treatment plants
- solid wastes generated in the treatment of sanitary wastewaters (spent septic systems, cooking grease and fat, and grit, screenings, etc. from sewage treatment plants

Annual reports

If the guidance specifies a limit on the quantity of a solid waste that may be accepted without specific Department license approval and/or waste characterization and a facility accepts one or more of the wastes, the quantity of each of these wastes accepted must be reported in a facility's annual report to the Department.

Special wastes and Collection of special waste fees

Commercial, municipal and regional association landfills that accept the following wastes covered in this guidance are required to collect special waste fees in accordance with 38 M.R.S.A. Sections 2202 and 2203-A: vehicle repair bay drain solids; backwash filtrate; and grit and screenings from sewage treatment plants.

MANAGEMENT OF CAR WASH BASIN GRIT

Car wash basin grit may be handled as follows:

1. CDD landfills - The Department defines "incidental amounts" of car wash basin grit to be no more than 50 cubic yards per year**.** The disposal of more than 50 cubic yards per year at a CDD landfill licensed under Chapter 401.7 must be permitted by license.

2. Other non-secure landfills - No more than 50 cubic yards per year of car wash basin grit may be disposed of at a non-secure landfill licensed for municipal solid waste ("MSW") disposal. The disposal of more than 50 cubic yards per year at a non-secure MSW landfill must be permitted by license.

3. Secure landfills - Car wash basin grit in any quantity may be disposed in a secure CDD, MSW or special waste landfill.

4. Beneficial uses – Any beneficial uses proposed for car wash basin grit must be licensed under the applicable provisions of Chapter 418.

5. Transfer stations - Car wash basin grit may not be handled at a transfer station unless specifically approved in the facility's license.

MANAGEMENT OF ASH FROM WOODWASTE BURN PILES and HOT LOADS AREAS AT LICENSED SOLID WASTE FACILITIES

This guidance applies to ash at licensed solid waste facilities from:

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- Burn piles; or
- Hot load areas; or
- Ash from residential woodstoves.

Ash from woodwaste burn piles and hot loads areas may be handled as follows:

1. CDD landfills - The Department defines incidental amounts of ash from the above 3 sources as a total of no more than 10 cubic yards of ash per year; the disposal of this quantity of ash from the 3 sources is exempt from waste characterization and additional licensing requirements. The disposal of a total of more than 10 cubic yards of ash in any year at a CDD landfill licensed under Chapter 401, section 7 must be permitted by license, and the ash must be characterized in accordance with Chapter 405, section 6.

2. Other non-secure landfills - A non-secure landfill licensed for the disposal of MSW may dispose of no more than 10 cubic yards of ash from a combination of the 3 sources listed above per year without characterizing the ash. The disposal of more than 10 cubic yards of ash in any year at a non-secure MSW landfill must be permitted by license, and the ash must be characterized in accordance with Chapter 405, section 6.

3. Secure landfills - Ash in any quantity may be landfilled at a secure landfill for the disposal of CDD, MSW or special waste.

4. *Note: The disposal of a total of 100 cubic yards or less of ash per year from the above sources and all other sources of oil, coal, wood or multifuel boiler ash is exempt from waste characterization by Chapter 405, section 6.C (1). Once the 100 cubic yards limit is exceeded, ash must be characterized in accordance with Chapter 405, section 6*

5. Agronomic utilization – No more than 30 cubic yards of ash per year from the burning of only wood wastes and/or tree chips from any one source at any one site may be land applied as a agricultural liming agent. "Wood wastes" means brush, stumps, lumber, bark, wood chips, shavings, slabs, edgings, slash, sawdust and wood from production rejects, that are not mixed with other solid or liquid waste. For the purposes of this definition, "lumber" is entirely made of wood and is free from metal, plastics, paint, varnish, stain and any other coatings. No more than 2 dry tons per acre may be spread in any one area.

6. Beneficial uses – Ash from the burning of only wood wastes, as defined in #4, above, that is beneficially used in cement production, concrete batching or asphalt batching is exempt from licensing under Chapter 418. Any other beneficial uses proposed for ash must be licensed under the applicable provisions of Chapter 418.

MANAGEMENT OF STORM SEWER GRIT AND SEDIMENT MATERIALS REMOVED FROM STORMWATER CONTROL STRUCTURES

Storm sewer grit and sediment materials removed from stormwater control structures may be handled as follows:

1. CDD landfills - The Department defines "incidental amounts" of storm sewer grit and sediment materials removed from stormwater control structures that contain more than 15% fines and have levels of TPHs less than 500 ppm to be no more than 50 cubic yards per year. If the materials contain 15% or less fines, any quantity is acceptable for disposal in a CDD landfill and no testing for TPHs is necessary. In all cases, if the grit or sediment materials may have come in contact with sanitary wastewater, it must receive daily cover before the end of the workday. The disposal of more than 50 cubic yards of storm sewer grit and sediment materials containing more than 15% fines per year at a non-secure CDD landfill licensed under Chapter 401, section 7 must be permitted by license.

2. Other non-secure landfills – No more than 50 cubic yards per year of storm sewer grit and sediment materials removed from stormwater control structures that contain more than 15% fines and have levels of TPHs less than 500 ppm may be disposed at a non-secure landfill licensed for the disposal of MSW. If the materials contain 15% or less fines, any quantity is acceptable for disposal in a non-secure landfill and no testing for TPHs is necessary. In all cases, if the grit or sediment materials may have come in contact with sanitary wastewater, they must receive daily cover before the end of the workday. The disposal of more than 50 cubic yards of storm sewer grit and sediment materials containing more than 15% fines removed from stormwater control structures per year at a non-secure MSW landfill must be permitted by license.

3. Secure landfills - Storm sewer grit and sediment materials removed from stormwater control structures in any quantity may be disposed in a secure CDD, MSW or special waste landfill. If the grit or sediment materials may have come in contact with sanitary wastewater, it must receive daily cover before the end of the workday.

4. Transfer stations - Storm sewer grit and sediment materials removed from stormwater control structures may not be handled at a transfer station unless specifically approved in the facility's license.

5. Beneficial uses – Any proposed beneficial uses must be licensed under the applicable provisions of Chapter 418.

MANAGEMENT OF BACKWASH FILTRATE FROM DRINKING WATER TREATMENT PLANTS.

Backwash filtrate from drinking water treatment plants may be handled as follows:

1. Secure landfills - Backwash filtrate may be disposed in a secure landfill for the disposal of CDD, MSW or special waste if specifically permitted by license. Backwash filtrate must be characterized in accordance with Chapter 405, section 6.C (2).

2. Beneficial uses (including agronomic utilization) – Although beneficial use of this waste is not precluded, the metals content of backwash filtrate is often high. Any proposed beneficial uses must be licensed under the applicable provisions of Chapter 418 or 419.

3. CDD landfills and other non-secure landfills – Backwash filtrate may not be handled at a non-secure landfill unless specifically approved in the facility's license. If approved for disposal, backwash filtrate must be characterized in accordance with Chapter 405, section 6.C (2).

4. Transfer stations –Backwash filtrate may not be handled at a transfer station unless specifically approved in the facility's license. Storage of this material for more than 2 years constitutes disposal.

5. Storage at locations other than transfer stations – Storage of backwash filtrate for longer than 90 days at these locations must be licensed under the applicable provisions of Chapter 402. Storage of this material for more than 2 years constitutes disposal.

MANAGEMENT OF VEHICLE REPAIR BAY DRAIN SOLIDS.

For the purpose of this guidance, vehicle repair bay drain solids is considered to be waste oil contaminated debris. Vehicle repair by drain solids may be handled as follows:

1. Secure landfills – No more than 50 cubic yards per year of solid waste from vehicle repair shop floor drain catch systems may be disposed at a secure landfill licensed for the disposal of MSW, CDD or special waste, without characterization of the waste or additional licensing requirements. The disposal of more than 50 cubic yards per year at a secure landfill must be permitted by license, and requires that the waste be characterized and managed in accordance with the requirements applying to the handling of waste oil contaminated soils and debris of Chapter 405, Subsection 6.C (3)(b).

2. Non-secure MSW landfills – No more than 50 cubic yards per year of solid waste from vehicle repair shop floor drain catch systems may be disposed at a non-secure landfill licensed for the disposal of MSW. The disposal of more than 50 cubic yards per year of vehicle repair bay drain solids must be permitted by license, and the waste must be characterized and managed in accordance with the requirements applying to the handling of waste oil contaminated soils and debris of Chapter 405, Subsection 6.C (3)(b).

3. CDD landfills - Vehicle repair bay drain solids may not be disposed at a non-secure CDD landfill licensed under Chapter 401.7 unless specifically approved in the facility's license.

4. Transfer stations - Vehicle repair bay drain solids may not be stored at a transfer station unless specifically approved in the facility's license.

5. Processing/beneficial uses - Processing or the beneficial use of motor vehicle repair bay drain solids must be permitted by license.

Note: If a vehicle repair shop bay has been used exclusively to allow ice and snow to melt off vehicles before the vehicles are repaired washed, the grit collected from that bay's floor drain catch system, if not contaminated by wastes generated before or after that use, may be handled as car wash grit.

MANAGEMENT OF SOLID WASTES GENERATED IN THE TREATMENT OF SANITARY WASTEWATERS.

1. SPENT SEPTIC SYSTEMS. "Spent Septic System" means sand, stones, rock and other similar waste filter media which have been removed from a residential septic system. A spent septic system may include pipes, filter fabric or other man-made materials associated with the storage and underground treatment of household sanitary wastewater. Spent septic systems may be handled as follows:

A. Abandoned in place - The Department considers the landfilling of septic system wastes to be a last resort disposal option and requests in place abandonment of the system whenever this is feasible.

B. Septage land application sites - The sand, stone, soil and other natural filter media may be disposed at a licensed septage land application site, in accordance with Chapter 420, section 6.A (3); the wastes must be immediately incorporated into the soil and then the area seeded. The areas at the septic site used for this purpose cannot be used for septage disposal during the next 12-month period. Over time, this practice will alter the soils at the site, so it is not a good long-term solution to these types of materials; it is acceptable on occasion. The filter fabric, piping and other man-made materials cannot be disposed at the septage site (see options C and D, below).

C. Disposal on same property – A spent septic system may be disposed at any location on the same parcel of property where it was generated, provided the location complies with all state and local regulations (for example, the system may not be placed in a wetland) and the waste is covered with a minimum of 12 inches of soil.

D. Landfills – Spent septic systems may be disposed at any licensed landfill (secure or non-secure), provided the waste receives daily cover before the end of the work day.

E. Construction sites - Spent septic systems may not be used as "construction fill" on other construction sites,

F. Cover material - Spent septic systems may not be used as cover material at a landfill.

G. Transfer stations - Spent septic systems may not be handled at a transfer station unless specifically approved in the facility's license.

Note: If the spent septic system is contaminated with wastes other than septage, it must be handled according to the requirements for that waste. For instance, if the system is contaminated with petroleum, it must be handled as non-virgin-waste-oil contaminated soil and/or debris.

2. USED COOKING GREASE AND FAT.

Used cooking grease and fat may be handled as follows:

A. Rendering plants - Used cooking grease and cooking fat not contaminated by non-food wastes may be transported to and processed at a rendering plant.

B. Secure landfills – This waste in any quantity may be disposed in a secure

landfill licensed to accept MSW, CDD or special waste. If the grease is free flowing at ambient outdoor temperature, it must be first bulked with sand, soil, wood shavings/sawdust or solid inert material prior to disposal.

C. Compost facilities – This waste may be composted at a Type II compost facility.

D. Septage sites – This waste may be disposed at a septage site in accordance with Chapter 420, section 6.A (2).

E. Publicly owned wastewater treatment plants - This waste may be accepted at a POTW that has the capability to handle it.

F. CDD and other non-secure landfills – This waste may not be handled at a non-secure landfill unless specifically approved in the facility's license.

H. Transfer stations - Grease and cooking oil that has been in contact with sanitary wastewater or any other waste may not be handled at a licensed transfer station unless specifically approved in the facility's license.

3. GRIT, SCREENINGS AND RELATED SEWAGE TREATMENT PLANT WASTES.

This includes grit, screenings, and related solid wastes removed at a sewage treatment plant or from the pump stations and other portions of the sewage collection system. Grit, screenings and related sewage treatment plant wastes may be handled as follows:

A. GRIT ONLY–

(1) Agronomic utilization - Grit may be partially dewatered, mixed with a treatment plant's sludge, and utilized.

(2) Septage sites - Grit may be disposed at a licensed septage disposal site in accordance with the guidance provided for debris from spent septic systems.

(3) CDD landfills - The Department defines "incidental amounts" of grit to be no more than 50 cubic yards per year of wastewater treatment plant grit. The waste must be covered with 6 inches of soil before the end of that workday. The disposal of more than 50 cubic yards per year at a CDD landfill must be permitted by license.

(4) Other non-secure landfills – No more than 50 cubic yards per year of wastewater treatment plant grit may be disposed at a non-secure landfill licensed for the disposal of MSW. The waste must be covered with 6 inches of soil before the end of that workday. The disposal of more than 50 cubic yards per year at a non-secure MSW landfill must be permitted by license.

(5) Secure landfills - Wastewater treatment plant grit in any quantity may be disposed in a secure MSW or special waste landfill. It

must receive appropriate daily cover before the end of that workday. No more than 50 cubic yards per year of wastewater treatment plant grit may be disposed at a secure CDD landfill; the disposal of more than 50 cubic yards of grit per year must be permitted by license.

(6) Transfer stations - Wastewater treatment plant grit may not be handled at a transfer station.

B. **SCREENINGS ONLY OR SCREENINGS MIXED WITH GRIT**

(1) Secure landfills – Screenings in any quantity may be disposed in a secure CDD, MSW or special waste landfill.

(2) Non-secure landfills – Non secure landfills for the disposal of CDD and MSW may not dispose of screenings unless specifically approved in the facility's license.

(3) Transfer stations – Screenings may not be handled at a transfer station unless specifically approved in the facility's license. If storage of this waste is licensed, the screenings may only be placed in the MSW container, must not be free flowing, and must not cause an unreasonable odor problem. A transfer station owner/operator has the right to refuse this waste if it may cause operational problems at the transfer station or rejection of the load at the disposal facility. Incinerators are likely to reject loads containing obvious amounts of this waste.

(4) Septage site – Screenings may not be disposed at a septage disposal site.

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NOTE: In all places in this guidance where an incidental amount for a waste stream is specified, the intent is for up to that amount of each waste to be allowed for disposal per year. In other words, a CDD landfill may receive 50 cubic yards per year of wastewater treatment plant grit, *and* 50 cubic yards per year of car wash basin grit, *and 50* cubic yards per year of storm sewer grit and sediments without having a license to accept the waste(s).

Cyndi Darling, ME DEP, Sludge & Residuals, Bangor

Wet Weather Guidelines

Many of you who have received or are in the process of negotiating a new MEPDES permit will notice that the permits contains a condition requiring the development and approval of a Wet Weather management Plan that meets guidelines established by the Department. In late September and early October, we ran four training sessions throughout the state where those guidelines were distributed and explained. If you were unable to attend the training and want to get a copy of the guideline, contact Dick Darling at (207) 287-7806 or by e-mail at dick.darling@state.me.us. We'll see that a copy of the guideline is sent to you.

For Practice

1. What is the best long-term fix for high F/M sludge bulking?
   a. Add chlorine to the RAS.
   b. Decrease sludge wasting.
   c. Increase sludge wasting.
   d. Reduce sludge age.

2. How would you reduce the growth of bacteria in a filter bed?
   a. Adjust the pH
   b. Backwash more frequently
   c. Pre-chlorinate
   d. Slow the rate of filtration

3. If the feed time for sludge centrifuge operated in a batch mode is less that the optimum time,
   a. a better centrate will result
   b. a better effluent quality will result
   c. a dryer discharge solid will result
   d. a wetter discharge solid will result

4. Determine the solids loading on a floatation unit if the flow is 0.8 MGD and the influent suspended solids are 1,500 mg/l
   a. 10,000 lb/day
   b. 12,600 lb/day
   c. 11,200 lb/day
   d. 1,700 lb/day

Fall 2002 Exam

By the time you get this O&M News, the Fall exam will probably be history. For those of you who took the exam, the results will, hopefully, be back before Christmas. If you're thinking about taking the Spring exam, it will be given on May 14, 2003 in the usual locations. Applications ***must*** be postmarked by March 31, 2003 or in our hands by April 1, 2003.

Operator Certification Renewals

Certified Operators who have ***odd numbered*** certificates will be due for renewal by March 1, 2003. Those operators will receive their renewal notices in early January. To renew your certificate, you need to show proof of at least 18 hours of approved training and pay the renewal fee of $20.00. If you are due to renew in 2003 and do not have enough training and cannot take the required 18 hours before March 1, 2003, submit your renewal form and renewal fee before march 1st. Include a letter stating when you will be taking the training to meet the 18-hour requirement. If we do not hear from you bay March 1, 2003, your certification will become inactive. If you are the operator in responsible charge of your treatment facility, it will be illegal for you to sign the DMR or Form 49 until you reactivate your certificate.

Answers to For Practice:

1. b To reduce bulking caused by a high F:M sludge, you need to reduce the F:M (Food: Microorganism) Ratio. To do this, you must increase the mass of microorganisms in the system. This is done by reducing the wasting rate and increasing the sludge mass in the syatem
2. c Pre-chlorination provides a chlorine residual in the water influent to the filter, reducing or eliminating microbial growth on the filter.
3. d If a centrifuge is not run for the optimum time, all the water that can be removed from the sludge will not be removed and the sludge will be wetter than it can be.
4. a 0.8 MGD % 1500 mg/L % 8.34 = 10008 pounds

Approved Training

November 16, 2002 in Mexico, ME - Confined Space Entry: Alternate Procedures c5, Reclassification c7 & Rescue and Emergency Services - A MUST Program – Sponsored by MWRA, (207) 729-6569 – Approved for 4 hours.

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November 17, 2002 in Portsmouth, NH – Biosolids Management & Reporting – Sponsored by NEIWPCC, (978) 323-7929 – Approved for 6 hours.

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November 19, 2002 in Ellsworth, ME – QA/QC for your Laboratory Equipment & Establishing a Laboratory QA/QC Program - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

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November 21, 2002 in Augusta, ME – Biological Nutrient Removal – Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

December 3&4, 2002 in Freeport, ME - MRWA Annual Conference – Sponsored by MWRA, (207) 729-6569 – Approved for TBA hours.

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December 4, 2002 in Livermore Falls - ME Polymer Sealants for use in Water & Wastewater Facilities along with ORP & pH Consideration - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

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December 10, 2002 in North Vassalboro - Advanced use of Databases for Water & Wastewater Operators - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.